WHAT IS CLAIMED IS:

1. A recombinant polynucleotide comprising a nucleotide sequence encoding at least 5 consecutive amino acids from Repro-PC-1.0 polypeptide (SEQ ID NO:2).

2. The polynucleotide of claim 1 wherein the nucleotide sequence encodes native Repro-PC-1.0 polypeptide (SEQ ID NO:2).

3. The polynucleotide of claim 1 wherein the nucleotide sequence encodes a Repro-PC-1.0 polypeptide analog.

4. The polynucleotide of claim 1 wherein the nucleotide sequence encoding at least 5 consecutive amino acids from Repro-PC-1.0 polypeptide is identical to a nucleotide sequence from SEQ ID NO:1.

5. The polynucleotide of claim 2 wherein the nucleotide sequence is identical to nucleotides 151-1425 of SEQ ID NO:1.

6. The polynucleotide of claim 3 wherein the nucleotide sequence encodes an immunogenic Repro-PC-1.0 polypeptide analog.

7. A polynucleotide probe or primer of at least 7 nucleotides that specifically hybridizes to a nucleotide sequence selected from Repro-PC-1.0 cDNA (SEQ ID NO:1) or its complement.

8. The polynucleotide probe or primer of claim 7 whose sequence is identical or complementary to a nucleotide sequence selected from Repro-PC-1.0 cDNA (SEQ ID NO:1).

9. The polynucleotide probe of claim 7 further comprising a label.

10. An inhibitory polynucleotide comprising an antisense sequence of at least 7 nucleotides that specifically hybridizes to a nucleotide sequence selected from Repro-PC-1.0 cDNA of SEQ ID NO:1 and that inhibits expression of Repro-PC-1.0 in cells.

11. The inhibitory polynucleotide of claim 10 whose sequence is complementary to a nucleotide sequence selected from Repro-PC-1.0 cDNA (SEQ ID NO:1).

12. A recombinant polynucleotide comprising an expression control sequence operably linked to a nucleotide sequence encoding:

a Repro-PC-1.0 polypeptide,

a Repro-PC-1.0 analog,

a polynucleotide probe or primer of at least 7 nucleotides that specifically hybridizes to a nucleotide sequence selected from Repro-PC-1.0 cDNA (SEQ ID NO:1) or its complement, or

an inhibitory polynucleotide comprising an antisense sequence of at least 7 nucleotides that specifically hybridizes to a nucleotide sequence selected from Repro-PC-1.0 cDNA (SEQ ID NO:1) and that inhibits expression of Repro-PC-1.0 in cells.

13. A recombinant cell comprising a recombinant polynucleotide of claim 12.

14. A method for detecting a polynucleotide comprising a nucleotide sequence selected from Repro-PC-1.0 cDNA (SEQ ID NO: 1) or its complement in a sample comprising the steps of:

(a) contacting the sample with a polynucleotide probe or primer comprising a sequence of at least 7 nucleotides that specifically hybridizes to the nucleotide sequence and

(b) detecting whether the polynucleotide has specifically hybridized to the polynucleotide,

whereby specific hybridization provides a detection of the polynucleotide in the sample.

15. A method of inhibiting Repro-PC-1.0 expression in a cell comprising providing the cell with an inhibitory polynucleotide of claim 10 or with a polynucleotide comprising a nucleotide sequence that encodes a decoy Repro-PC-1.0 analog.

16. A purified, recombinant Repro-PC-1.0 polypeptide whose amino acid sequence is identical to that of SEQ ID NO:2, or allelic variants of SEQ ID NO:2.

17. A Repro-PC-1.0 polypeptide analog that is not naturally occurring and that comprises a sequence of at least 5 consecutive amino acids selected from the amino acid sequence of Repro-PC-1.0 polypeptide (SEQ ID NO:2).

18. The Repro-PC-1.0 polypeptide analog of claim 17 which is a decoy that competes with Repro-PC-1.0 polypeptides for interaction with molecules that naturally interact with Repro-PC-1.0.

19. The Repro-PC-1.0 polypeptide analog of claim 17 which, when presented as an immunogen, elicits the production of an antibody which specifically binds to native Repro-PC-1.0 polypeptide.

20. A composition comprising an antibody that specifically binds to Repro-PC-1.0 polypeptide (SEQ ID NO:2).

21. The composition of claim 20 wherein the antibodies are monoclonal antibodies.

22. The composition of claim 20 wherein the antibodies are polyclonal antibodies.

23. A method for detecting a Repro-PC-1.0 polypeptide in a sample, comprising the steps of:

(a) contacting the sample with an antibody that specifically binds to the Repro-PC-1.0 polypeptide and

(b) detecting specific binding between the antibody and Repro-PC-1.0 polypeptide,

whereby specific binding provides a detection of Repro-PC-1.0 polypeptide in the sample.

24. A method for use in the diagnosis of prostate cancer in a subject comprising the steps of:

(a) detecting a diagnostic amount of Repro-PC-1.0 mRNA or Repro-PC-1.0 polypeptide in a sample from the subject; and

(b) comparing the diagnostic amount with a normal range of Repro-PC-1.0 mRNA or Repro-PC-1.0 polypeptide in a non-cancerous control sample,

whereby a diagnostic amount above the normal range provides a positive indication in the diagnosis of prostate cancer.

25. The method of claim 24 wherein the sample is blood, urine, lymph node tissue or prostate tissue.

26. A method of detecting prostate cancer cells in a subject comprising the steps of:

(a) administering to the subject a compound comprising an antibody coupled to a label and

(b) detecting the location of the compound in the subject.

27. The method of claim 26 wherein the label is (1) a radioactive label and the step of detecting comprises detecting label by camera imaging, or (2) an isotopic label and the step of detecting comprises detecting the label by magnetic resonance imaging.

28. A method for use in following the progress of prostate cancer in a subject comprising the steps of:

(a) detecting first and second amounts of Repro-PC-1.0 mRNA or Repro-PC-1.0 polypeptide in samples from the subject at a first and a second time; and

(b) comparing the first and second amounts.

whereby an increase between the first and second amounts indicates progression of the prostate cancer and a decrease between the first and second amounts indicates remission of the prostate cancer.

29. A method for the prophylactic or therapeutic treatment of prostate cancer in a subject comprising administering to the subject an inhibitory polynucleotide of claim 10, an inactive Repro-PC-1.0 analog polypeptide that acts as a decoy or a composition comprising an immunotoxin that specifically binds to Repro-PC-1.0 polypeptide in an amount effective to inhibit metastasis of prostate cancer cells, whereby inhibition of metastasis provides the treatment of prostate cancer.

30. A polypeptide or polynucleotide vaccine for eliciting an immune response against Repro-PC-1.0 comprising an immunogenic Repro-PC-1.0 polypeptide analog or a polynucleotide encoding the analog.

31. The vaccine of claim 31 wherein the analog bears an MHC Class I or MHC Class II binding motif.

32. A method of eliciting in a subject an immune response against a cell bearing Repro-PC-1.0 polypeptide on its surface comprising administering to the subject a vaccine of claim 27.

33. The method of claim 32 wherein the immune response is an MHC Class I-restricted cell-mediated immune response and the vaccine comprises a recombinant polynucleotide encoding an immunogenic Repro-PC-1.0 polypeptide analog bearing an MHC Class I binding motif.

34. The method of claim 32 wherein the immune response is an MHC Class II-restricted immune response and the vaccine comprises an immunogenic Repro-PC-1.0

polypeptide analog bearing an MHC Class II binding motif or a recombinant polynucleotide encoding the analog.

35. A screening method for determining whether a compound modulates the expression of Repro-PC-1.0 in a cell comprising contacting the cell with the compound and determining whether the production of Repro-PC-1.0 mRNA or polypeptide are increased or decreased.

36. A screening method for determining whether a compound inhibits the activity of Repro-PC-1.0 comprising contacting a cell that expresses Repro-PC-1.0 with the compound and determining whether the exocytois from the cell or capacitance across the cell membrane is altered.

37. A method of detecting a chromosomal translocation of a Repro-PC-1.0 gene comprising the steps of:

a) hybridizing a labeled probe of claim 7 to a chromosome spread from a cell sample to determine the pattern of hybridization and

b) determining whether the pattern of hybridization differs from a normal pattern.

38. A method of detecting polymorphic forms of Repro-PC-1.0 comprising comparing the identity of a nucleotide or amino acid at a selected position from the sequence of a test Repro-PC-1.0 gene or polypeptide with identity of the nucleotide or amino acid at the corresponding position of native Repro-PC-1.0 (SEQ ID NO:1 or 2), whereby a difference in identity indicates that the test polynucleotide is a polymorphic form of Repro-PC-1.0.